CASE REPORT: TESTICULAR MICROLITHIASIS

**CLINICAL PRESENTATION:** This is a 14-year-old male who presented with a possible testicular mass. An ultrasound with Doppler was performed at AIC as requested by Pediatrician Dr. Satey, MD.

**IMAGING FINDINGS:** Fig. 1 is a sagittal image of the testicle showing numerous punctuate echogenic foci (calcifications). Some refer to this as a “starry sky” appearance. No significant shadowing is noted, however, probably due to small size of the calcifications. Fig. 2 is a Doppler scan showing normal flow to the testicles and mild hydrocele but no torsion.

**DIAGNOSIS:** These findings are compatible with Testicular Microlithiasis (TM). It is usually a benign condition. There have been reports of concomitant malignancies such as germ cell tumors in patients with TM. This patient had no other mass.

**DISCUSSION:** There is an association with testicular intratubular germ cell neoplasia (IGCN), germ cell version of carcinoma-in-situ (CIS). TM is relatively rare with prevalence of approximately 0.6% of testicular ultrasonograms. TM has been associated in both benign and malignant conditions such as Klinefelter syndrome, male pseudohermaphroditism, Down syndrome, infertility, cryptorchism, hypogonadism, fragile X syndrome, pseudoxanthoma elasticum, and pulmonary microlithiasis. Many of these benign conditions are risk factors for testicular malignancies. As per Reference #1 below, there is up to 20-fold increased risk of testicular cancer, requiring sonographic surveillance for tumor.

**Ray Hashemi, MD**
Ray H. Hashemi, M.D., Ph.D.
Director